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IMPACT OF TRADITIONAL COOKING METHODS ON THE ANTIOXIDANT ACTIVITY OF ALGERIAN CARROTS CULTIVARS (Daucus carota L.)

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ABSTRACT

Fruits and vegetables are rich in antioxidants, and carrots, in particular, are a source of phenolics, vitamin A, and carotenoids. Carrots are regularly consumed raw, cooked, or in juice form for their particular taste, sweet flavor, and their high carotenoid content. The objective of the present study was to assess the effect of two common domestic cooking methods (steaming and boiling) on the content of the antioxidant compounds and the antioxidant power of two varieties of orange carrots cultivated in Algeria. The results showed that both steaming and boiling led to an increase in the total carotenoid content and reducing power. Additionally, the amount of phenolics, flavonoids, and antiradical activity increased in the steamed samples. However, a slight decrease in phenolic content was noted in the studied cultivar after boiling. Analysis of cooking water revealed that thermal treatment promoted the release of some antioxidant compounds into the water cooking, thus contributing to their antioxidant activity.